



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/698,482

11/03/2003

Shigeo Ishida

117649

3222

25944

7590

04/10/2006

OLIFF & BERRIDGE, PLC

P.O. BOX 19928

ALEXANDRIA, VA 22320

EXAMINER

HAUGLAND, SCOTT J

ART UNIT

PAPER NUMBER

3654

DATE MAILED: 04/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/698,482	ISHIDA ET AL.	
	Examiner	Art Unit	
	Scott Haugland	3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/22/06 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 7 and 9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The application as originally filed does not disclose that the buffer unit starts driving before the frictionally transporting section starts feeding back the continuous

Art Unit: 3654

paper and that the buffer unit stops driving after the frictionally transporting section stops feeding back the continuous paper as recited in claims 7 and 9.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 6, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taubenberger in view of Focke et al (U.S. Patent No. 4,603,800).

Taubenberger discloses a printing apparatus comprising a printing unit DA and a continuous paper transporting mechanism. The paper transporting mechanism comprises a frictionally transporting section 13, paper braking sections (6 and the braking section comprising axles 2; col. 1, lines 35-37), a paper-position restriction section 3 having a pair of rollers 4 arranged at an oblique angle to the paper transporting direction, and buffer unit 10. Note that the paper-position restricting section 3 is arranged between the paper transporting section 13 and the paper braking section comprising axles 2.

Taubenberger does not disclose that the buffer unit is configured to separate from the surface of the continuous paper when the continuous paper is feeding forward.

Focke et al teaches spacing rollers 33, 34 of a web accumulator apart during normal feeding and processing of the web so that the web is fed in a straight line without contact with the rollers. The rollers are moved into a web engaging and accumulating configuration only when the accumulator is required for temporary storage of a length of web.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Taubenberger with an accumulator having pushing-out members or rollers (buffer unit) that are moved away from the web being fed to the printer during printing and normal forward feeding of the web to the printer as taught by Focke et al to eliminate unnecessary interference of the accumulator with the web when it is not necessary to store additional web material.

With regard to claim 10, the buffer unit 10 of Taubenberger would start driving when the frictionally transporting section starts to transport the paper toward the printer since the loop of paper around 10 starts to shorten when the feed rollers 13 start. Also note that the buffer unit 10 is moved in a direction away from the surface of the paper as an amount of buffer of the continuous paper is decreased as in Applicants' invention.

Claims 1-4, 8, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taubenberger (U.S. Patent No. 5,685,471) in view of Focke et al (U.S. Patent No. 4,603,800) or over Taubenberger in view of Ohba et al (U.S. Patent No. 6,592,276) and Focke et al.

Taubenberger is described above.

It appears that the printing section of Taubenberger is disposed on a downstream side of the frictionally transporting section, as recited on the last two lines of claim 1 since elements 13 are disclosed as being feed rollers and they are immediately adjacent to the entrance of printing unit DA.

Assuming, arguendo, that Taubenberger does not teach the downstream position of the printing section required by claims 1 and 11, Ohba et al teaches locating a printing section for printing on continuous paper web downstream of feed rollers 8, 9 of a paper transporting mechanism.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to locate the printing section of Taubenberger on the downstream side of the frictionally transporting section as taught by Ohba et al to feed the paper through the printing section without excessive tension in the printing section.

Taubenberger does not disclose that the buffer unit is configured to separate from the surface of the continuous paper when the continuous paper is feeding forward (claims 1 and 11). Taubenberger does not disclose that the pushing-out member is located at a position spaced apart from the paper during printing (claim 3).

Focke et al teaches spacing rollers 33, 34 of a web accumulator apart during normal feeding and processing of the web so that the web is fed in a straight line without contact with the rollers. The rollers are moved into a web engaging and accumulating configuration only when the accumulator is required for temporary storage of a length of web.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Taubenberger with an accumulator having pushing-out members or rollers that are moved away from the web being fed to the printer during printing and normal feeding of the web to the printer as taught by Focke et al to eliminate unnecessary interference of the accumulator with the web when it is not necessary to store additional web material.

With regard to claim 8, the buffer unit 10 of Taubenberger would start driving when the frictionally transporting section starts to transport the paper toward the printer since the loop of paper around 10 starts to shorten when the feed rollers 13 start. Also note that the buffer unit 10 is moved in a direction away from the surface of the paper as an amount of buffer of the continuous paper is decreased as in Applicants' invention.

Response to Arguments

Applicants' arguments filed 2/22/06 have been fully considered but they are not persuasive.

Regarding the rejection under the first paragraph of 35 U.S.C. 112, Applicants argue that claims 7 and 9 are supported by the specification at page 14, lines 20-25. However, this portion of the specification discusses rates of driving of the buffer and drive roller 26 and does not discuss when the buffer starts or stops feeding back paper. It is, also, noted that Figs. 3 and 4 indicate that the buffer and drive roller start and stop at the same times.

Applicants argue that Taubenberger does not disclose or suggest a buffer unit provided between the paper-position restricting section and the frictionally transporting section and configured to come into contact with a surface of the continuous paper when the continuous paper is feeding forward, and to separate from the surface of the continuous paper when the continuous paper is feeding forward as recited in claim 5. However, Focke et al teaches configuring a buffer unit so that it comes into contact with a surface of a web to temporarily store web and separates from the surface of the web when temporary storage is no longer needed. Focke et al would suggest to an ordinary artisan to provide Taubenberger with a buffer configured to separate from the paper web when the paper is feeding normally in the forward direction to eliminate unnecessary interference with the web since no temporary storage of excess web is required in that operating state.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Haugland whose telephone number is (571) 272-6945. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (571) 272-6951. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3654

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sjh
sjh
4/4/06

Kathy Matecki
KATHY MATECKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600